

1496-124A
082:17

Jordan

96
5/22
No 3

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of

David J. Kyle

Serial No. 07/645,499

Filed: January 24, 1991

For: MICROBIAL OIL MIXTURES
AND USES THEREOF



Examiner:

Group Art Unit: 132

125
124

121
126
51
0

INFORMATION DISCLOSURE STATEMENT

Commissioner of Patents
and Trademarks
Washington, D.C. 20231

Dear Sir:

The material listed on accompanying form PTO-1449 is cited in compliance with the provisions of 37 C.F.R. 1.56 and 1.97 through 1.99. As to any material supplied, Applicant does not admit that it is "prior art" under 35 U.S.C. § 102 and § 103, and specifically reserves the right to antedate any such material as by a showing under 37 C.F.R. 1.131 or other method. The relevance of each reference is discussed below.

U.S. Patent No. 4,670,285, issued to Clandinin et al. in 1987, discloses a reportedly edible fat product for incorporation into a formula for feeding infants. The product includes certain fatty acids, namely, at least one of a C₂₀ or C₂₂, omega-6 fatty acid and a C₂₀ or C₂₂, omega-3 fatty acid, found to be present in human milk.

U.S. Patent No. 4,216,236, issued to Mueller et al. in 1980, discloses a food product for infants which includes lipids, proteins, carbohydrates, mineral salts and water.

U.S. Patent No. 4,303,692, issued to Gaull in 1981, discloses a synthetic infant formula containing taurine, cholesterol and/or isethionic acid.

U.S. Patent No. 4,876,107, issued to King et al. in 1989, discloses substitute milk fat containing 2-saturated glycerides, such as 2-palmitic acid glycerides, in which the 1,3 positions are randomly occupied by different shorter chain and/or saturated fatty acids.

U.S. Patent No. 2,923,628, issued to Otto in 1960, discloses a synthetic milk which reportedly simulates bovine milk.

U.S. Patent No. 3,542,560, issued to Tomarelli et al. in 1970, discloses an infant formulation which reportedly substantially approximates human milk in fat assimilability. The formulation contains 25% β -palmitic acid by weight of the total palmitic acid content of the composition and varied amounts of linolenic acid.

U.S. Patent No. 4,614,663, issued to Rule in 1986, discloses a fat-containing food product containing palm oil and other vegetable oils and optionally lecithin.

U.S. Patent No. 4,282,265, issued to Theuer in 1981, discloses vegetable oil mixtures composed of palm oil, and lauric acid oils, oleic acid oils and linoleic acid oils. The mixtures reportedly may be used in infant formulas.

U.S. Patent No. 4,938,984, issued to Traitler et al. in 1990, discloses food compositions containing oil extracted from pips of fruits from the genus Ribes containing at least 4% by weight of γ -linoleic acid.

U.S. Patent No. 4,526,793, issued to Ingenbleek et al. in 1985, discloses lipid compositions containing γ -linoleic acid, medium chain triglycerides and an edible oil containing C_{12} - C_{18} lipid fractions.

U.S. Patent No. 3,649,295, issued to Bernhart in 1972, discloses fat compositions of oleic oil, coconut or babassu oil and optionally a seed oil and/or soy lecithin for use in infant formula.

U.S. Patent No. 2,611,706, issued to Bernhart et al. in

1952, discloses a milk base which is reportedly adapted to promote growth of acid-forming bacteria in the human colon when ingested.

U.S. Patent No. 4,544,559, issued to Gil et al. in 1985, discloses a nucleotide-enriched humanized milk for infant consumption.

EPA 269,251, published June 1, 1988, discloses a method for producing a fat containing γ -linolenic acid by employing cultures of microorganisms belonging to the genus *Abisidia*, the genus *Mortierella*, the genus *Mucor*, the genus *Rhizopus* or the genus *Syncephalastrum*.

WO 90/13656, published November 15, 1990 (attached thereto is an International Search Report), discloses a process for preparing mixtures of mono-glycerides containing 60% omega-3 fatty acids.

DE 3603000 A1 (attached thereto is an English translation of the description of the patent disclosure), published August 6, 1987, discloses fat mixtures of highly polyunsaturated fatty acids of animal and/or vegetable fats.

Abstract of JP 1,132,371, published May 24, 1989, discloses a microbe from the *Mucor* species which reportedly can produce a high γ -linoleic acid content lipid component and is deposited as FERM-9680.

Sanders et al., American Journal of Clinical Nutrition, 31:805-813 (1978), the relevance of which is disclosed on page 1 of the subject patent application.


Carlson et al., Inform, 1:306 (1990), the relevance of which is disclosed on page 1 of the specification of the subject application.

Bourre et al., Lipids, 25:354-356 (1990), the relevance of which is disclosed on page 6 of the specification of the subject application.

Applicant submits that none of the above mentioned references derogate from the patentability of the invention described and claimed in the subject application.

Respectfully submitted,

ROTHWELL, FIGG, ERNST & KURZ, p.c.

By 

William T. Enos
Attorney for Applicant
Registration No. 33,128

1700 K Street, N.W.
Washington, D.C. 20006
Telephone: (202) 833-5740